## AMENDMENTS TO THE CLAIMS:

Kindly amend claims 1, 3, 9 and 10 as follows:

The present listing of claims replaces all prior versions and listings of claims in this application.

## Listing of Claims:

1.  (Currently amended)  An image binarization method, wherein

as a first processing, multi-digitized luminance data obtained by digitally converted video signals from an imaging device for each pixel on each horizontal scanning line is stored in an even-numbered row horizontal line memory if the current horizontal scanning line is an even-numbered row, and is stored in an odd-numbered row horizontal line memory if the horizontal scanning line is an odd-numbered row, and in said multi-digitized luminance data on the current scanning line, detected maximum value $MAX_i$ and minimum value $MIN_j$ exceeding a predetermined displacement level, and addresses $MAXP_i$ and $MINP_j$ at the detected pixel positions are stored in an even-numbered detection memory if the current horizontal scanning line is an even-numbered row, or in an odd-numbered row detection memory if the current horizontal scanning line is an odd-numbered row; and

as a second processing, reading-out is carried out from the even-numbered detection memory if the current horizontal scanning line is an odd-numbered row, or from the odd-numbered detection memory if the current horizontal scanning line is an even-numbered row, and based on floating thresholds $FT_h=MIN_j+(MAX_i-MIN_j) \times K$ ~~(herein, K is an~~

~~emphasis coefficient between 0 and 1, and h, i, and j are integers starting from zero)~~ for each section $X_h$ of the horizontal pixel address row set by means of operation, the multi-digitized data read out from the even-numbered horizontal line memory in the case of the odd-numbered row or the odd-numbered horizontal line memory in the case of the even-numbered row is converted into binary data<u>, wherein h is an integer starting from zero, i is an integer h/2 rounded up to the nearest integer, j is an integer h/2 rounded down to the nearest integer, and K is an emphasis coefficient between 0 and 1</u>.

2. (Original) An image binarization method according to Claim 1, wherein only the first processing is carried out for the first horizontal scanning line, and only the second processing is carried out for the final horizontal scanning line.

3. (Currently amended) A binary image creation method, wherein

as a first processing, multi-digitized luminance data obtained by digitally converting video signals from an imaging device for each pixel on each horizontal scanning line is stored in a horizontal line memory row of an image memory corresponding to the current horizontal scanning line, and detected maximum value $MAX_i$ and minimum value $MIN_j$ exceeding a predetermined displacement level, and addresses $MAXP_i$ and $MINP_j$ of the detected pixel positions are stored in a specific one of at least two detection memories; and

as a second processing, reading-out is carried out from the detection memory specified by the previous horizontal scanning line, and based on floating thresholds $FT_h = MIN_j + (MAX_i - MIN_j) \times K$ ~~(herein, K is an emphasis coefficient between 0 and 1, and h,~~

i, and j are integers starting from zero) for each section $X_h$ of the horizontal pixel address

row set by means of operation, the multi-digitized data read out from the horizontal line

memory row of the image memory corresponding to the previous horizontal scanning line is

converted into binary data for each pixel and rewritten, wherein h is an integer starting from

zero, i is an integer h/2 rounded up to the nearest integer, j is an integer h/2 rounded down to

the nearest integer, and K is an emphasis coefficient between 0 and 1.

4. (Original) A binary image creation method according to Claim 3, wherein only

the first processing is carried out for the first horizontal scanning line and only the second

processing is carried out for the final horizontal scanning line.

5. (Previously presented) An image binarization method according to Claim 1,

wherein the floating threshold FT is determined by setting the emphasis coefficient K=0.5.

6. (Previously presented) An image binarization method according to Claim 1,

wherein the floating threshold FT is determined by setting the emphasis coefficient K>0.5,

and white characters are effectively reflected on a black background.

7. (Previously presented) An image binarization method according to Claim 1,

wherein the floating threshold FT is determined by setting the emphasis coefficient K<0.5,

and black characters are effectively reflected on a white background.

8. (Previously presented)  An image binarization method according to Claim 1, wherein the fineness of the entirety of an image is effectively reflected by lowering the displacement level.

9.  (Currently amended)  An image binarization method, wherein

as a first processing, multi-digitized luminance data obtained by digitally converting video signals from an imaging device for each pixel on each horizontal scanning line that has been stored in one horizontal line memory in the previous horizontal scanning is read-out and then stored, and in the multi-digitized luminance data on the current scanning line, detected maximum value $MAX_i$ and minimum value $MIN_j$, and the addresses $MAXP_i$ and $MINP_j$ of the detected pixel positions thereof are stored in an even-numbered row detection memory if the current horizontal scanning line is an even-numbered row, or stored in an odd-numbered detection memory in the case of an odd-numbered row; and

as a second processing, data reading is carried out from the even-numbered row detection memory when the current horizontal scanning line is an odd-numbered row, or from the odd-numbered row detection memory in the case of an even-numbered row, and based on floating thresholds $FT_h=MIN_j+(MAX_i-MIN_j) \times K$ ~~(herein, K is an emphasis coefficient between 0 and 1, and h, i, and j are integers starting from zero)~~ for each section $X_h$ of the horizontal pixel address row set by means of operation, the multi-digitized data of the previous horizontal scanning read-out by the first processing is converted into binary data for each pixel, wherein h is an integer starting from zero, i is an integer h/2 rounded up

~~to the nearest integer, j is an integer h/2 rounded down to the nearest integer, and K is an~~

~~emphasis coefficient between 0 and 1.~~

10. (Currently amended) An image binarization method, wherein

as a first processing, multi-digitized luminance data obtained by digitally converting video signals from an imaging device for each pixel on each horizontal scanning line is stored in a specific one of at lest two horizontal line memories, and in the multi-digitized luminance data on the current scanning line, detected maximum value $MAX_i$ and minimum value $MIN_j$ exceeding a predetermined displacement level, and the addresses $MAXP_i$ and $MINP_j$ of the detected pixel positions are stored in a specific one of at least two detection memories; and

as a second processing, reading-out is carried out from the detection memory specified by the previous horizontal scanning line, and based on floating thresholds $FT_b=MIN_j+(MAX_i-MIN_j) \times K$ ~~(herein, K is an emphasis coefficient between 0 and 1, and h, i, and j are integers starting from zero)~~ for each section $X_h$ of the horizontal pixel address row set by means of operation, multi-digitized data read-out from the previous horizontal line memory specified by the horizontal scanning line is converted into binary data for each pixel, ~~wherein h is an integer starting from zero, i is an integer h/2 rounded up to the nearest integer, j is an integer h/2 rounded down to the nearest integer, and K is an emphasis coefficient between 0 and 1.~~

11. (Previously presented)  An image binarization method according to Claim 2, wherein the floating threshold FT is determined by setting the emphasis coefficient K=0.5.

12. (Previously presented)  An image binarization method according to Claim 2, wherein the floating threshold FT is determined by setting the emphasis coefficient K>0.5, and white characters are effectively reflected on a black background.

13. (Previously presented)  An image binarization method according to Claim 2, wherein the floating threshold FT is determined by setting the emphasis coefficient K<0.5, and black characters are effectively reflected on a white background.

14. (Previously presented)  An image binarization method according to Claim 2, wherein the fineness of the entirety of an image is effectively reflected by lowering the displacement level.